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A Validation Study of Rokeach's Theory of Prejudice**

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## Psychological Monographs: General and Applied

# THE INFLUENCE OF BELIEF SYSTEMS ON INTERPERSONAL PREFERENCE: A VALIDATION STUDY OF ROKEACH'S THEORY OF PREJUDICE<sup>1</sup>

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A full-scale test of Rokeach's theory of belief prejudice with 630 9th-grade students strongly supports the validity of the theory. When information about a stimulus person's beliefs in the area of personal values is made available, similarity or dissimilarity in beliefs is the primary determinant of attitudes of white gentiles toward Negroes and Jews. These results also hold for Negro and Jewish students' attitudes towards members of the majority. Only secondarily does racial or religious affiliation per se, or high versus low relative socioeconomic status, influence the students' feelings (friendliness measure) and action orientations (social distance scale) toward others. In response to individual social distance items, gentile Ss showed relative unwillingness to interact with Negroes as compared with whites in "sensitive" areas of interracial contact. Similar results, but to a much lesser degree, were obtained for anticipated interaction with Jewish stimulus persons. Gentile Ss' responses on another occasion to an otherwise undescribed "Negro teenager" correlated substantially with their responses to a lower status Negro to whom values unlike their own were ascribed. Other data indicate strong race and religion effects and a weaker status effect in the absence of information about stimulus persons' beliefs.

ONE of the many ideas presented in *The Open and Closed Mind* (Rokeach, Smith, & Evans, 1960) is that prejudice may be in large part the result of perceived dissimilarity of belief systems. In essence, Rokeach et al. (1960) contended that the prejudiced person does not reject a person of another race, religion, or nationality because of his ethnic membership per se, but rather because he perceives that the other differs from him in important beliefs and values. This specific hypothesis was developed out of Rokeach's general theoretical framework, in which the emphasis is on cognitive determinants of social behavior

and belief systems are given focal attention.

Rokeach et al. report two studies in which subjects were asked to rate pairs of stimulus individuals on a 9-point scale, defined at the ends by the statements, "I *can't* see myself being friends with such a person" and "I can *very easily* see myself being friends with such a person." In one experiment, the stimulus individuals were white or Negro; in the other they were Jewish or gentile. Reported beliefs of the stimulus individual concerning racial, religious, and other matters were also varied. It was found that the friendship preferences expressed were determined primarily on the basis of congruence in beliefs rather than on racial or religious grounds.

The presentation of the theory of belief prejudice, based on these preliminary experiments, has led to a number of studies that both lend support to and qualify the basic tenets of the theory (Byrne & Wong, 1962; Rokeach & Mezei, 1966; Stein, Hardyck, & Smith, 1965; Triandis, 1961; Triandis & Davis, 1965). These studies have developed along the following lines:

<sup>1</sup>This paper is based on a doctoral dissertation submitted to the Graduate Division and Psychology Department of the University of California, Berkeley, June 1965. This research was supported by Grant MH 10610-01 from the National Institutes of Health, United States Public Health Service to M. Brewster Smith, principal investigator. The author wishes to express his gratitude to Professor Smith and to Jane Allyn Hardyck for their helpful suggestions and critical comments in the preparation of this paper.

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1. Triandis (1961) objected to the use by Rokeach et al. of a single dependent variable of friendship and instead employed a social distance scale. Varying race, religion, occupational status, and similarity of philosophy of life to that of the subject, Triandis obtained a "race effect" that accounted for about four times as much variance as any of the other three effects singly. Triandis concluded that race, rather than belief, is the primary determinant of prejudice.

2. Rokeach (1961) criticized Triandis' manipulation of similarity of philosophy via Morris' (1956) "13 ways to live," as based on complex and diffuse paragraphs that would not make similarity or difference of beliefs salient to the subjects.

3. Byrne and Wong (1962) essentially supported Rokeach's position, employing alleged responses to an attitude questionnaire as the basis for manipulating similarity of belief, and personal feelings of friendliness and willingness to work together in an experiment as dependent variables.

4. Stein et al. (1965), attempting to reconcile the disparate findings, followed Byrne and Wong in constructing stimulus individuals who were intended to appear more real to their subjects than had been the case in the Rokeach et al. and Triandis studies. Their modification also required subjects to respond to stimulus persons individually rather than in pairs in order to minimize any awareness that the choice was between response in terms of race or of belief. As dependent variables, Stein et al. employed both a measure of friendly feelings and a social distance scale, on which responses to each of the individual items as well as to the total scale could be separately analyzed. Their findings, which provide the starting point for the present study, included the following:

First, in the analysis of "friendliness" responses and total social distance scale scores, belief accounted for much more variance than race, although both effects were significant. Secondly, strong "race effects" were obtained on "sensitive" items in the social distance scale, perhaps reflecting in-

stitutionalized areas of prejudice. There were significant race effects, and, to a lesser degree, status effects on the total scores on a social distance scale administered to the same subjects on a previous occasion when race and status had been varied and no information about beliefs provided. Thirdly, a correlational analysis showed that subjects responded to a Negro stimulus person presented as unlike them in values in much the same way as they had previously responded to an otherwise unspecified Negro about whom they had no other information ( $r = .62$ ). This correlation was interpreted to mean that, in the absence of other information, subjects assume that Negroes are unlike them in values. Stein et al. (1965) concluded:

When subjects are forced to evaluate stimulus individuals in terms of their beliefs, then belief congruence is more important than race. But when the belief component is not provided, spelled out in considerable detail, subjects will react in racial terms on the basis of assumptions concerning the belief systems of others, and of emotional or institutionalized factors [p. 289].

5. Rokeach and Mezei (1966) were interested in seeing if the theory of belief prejudice could be generalized beyond the pencil-and-paper test situations to behavior in representative real life settings. In three interrelated experiments, a naïve subject was asked either to state a preference for two of four confederates to take a coffee break, or to choose among fellow "job applicants" the two with whom he would most like to work. Two of the four confederates were Negro and two were white. One of each race agreed and one disagreed with the subject. The authors conclude that in all three experiments, similarity of belief is the most frequent basis of subjects' choices.

6. Recently, Triandis and Davis (1965) reported a study in which 300 subjects responded on 12 semantic and 15 Behavioral Differential scales to eight stimulus persons generated by all possible combinations of the characteristics Negro-white, male-female, and pro or con civil rights legislation. Some subjects proved to be extremely sensitive to the race of the stimulus persons



while other subjects showed a greater sensitivity to the beliefs of the stimulus persons. The likelihood of a person's showing sensitivity to race as compared to belief is related to the degree of intimacy of the behavioral situations described. For almost all subjects, the more intimate the behaviors, the more frequently did subjects respond in terms of race. For the least intimate behaviors, most subjects responded in terms of belief. When the behaviors were intermediate in intimacy, subjects characterized independently as "racially prejudiced" responded in terms of race, and subjects characterized independently as "belief prejudiced" responded in terms of belief. These findings are generally consistent with those of Stein et al., especially with regard to the importance of race in determining responses to intimate items on a social distance scale. Although Stein et al. did not have an independent measure of their subjects' prejudicial orientation, that is, belief or race, they found, contrary to Triandis and Davis, that belief was equally important throughout the social distance scale.

#### RATIONALE AND AIMS

The present research was undertaken to replicate the original study by Stein et al. (1965) with a more adequate sample, and to elaborate upon it in a variety of ways. In connection with another study<sup>3</sup> questionnaires had been administered in the Spring of 1963 to the entire eighth grade of the Commutertown<sup>4</sup> public school system. Crucial for the present study was the inclusion of a series of items tapping the respondents' beliefs in the area of personal values. The data to be reported here were collected from the same students in the late

<sup>3</sup> A large-scale study of adolescent intergroup relations and attitudes being conducted by Jane Allyn Hardyck and M. Brewster Smith through the Survey Research Center, University of California, with the support of the Anti-Defamation League of B'nai B'rith provided the opportunity for the present investigation.

<sup>4</sup> Commutertown is the fictitious name given to a Northeast suburban city. I am indebted to the superintendent and staff of the Commutertown schools, who must remain anonymous, for their cooperation, and to Oscar Cohen of the Anti-Defamation League for his part in securing it.

Spring of 1964 when they were ninth graders.

Specifically, the present study replicates all of the analyses of white gentile students' attitudes toward Negro stimulus teenagers. By way of extension, it assesses subjects' responses to stimulus teenagers composed so as to vary systematically not only race (white versus Negro) and similarity of belief, but also social status. Further, the generality of findings is extended by having half the sample respond to stimulus adults rather than to stimulus teenagers. In some analyses, the religion rather than race of the stimulus person is varied with belief and status. The larger and more heterogeneous sample in the present study permits sex differences to be examined and separate analyses made for Jewish, Negro, white Protestant, and white Catholic subjects, the former two groups being unrepresented in the earlier study.

The inclusion of religious affiliation as a variable has interesting implications in terms of Rokeach's theory. Knowledge of a person's religion yields information about central features of his probable beliefs. Thus, when both religion and belief (exemplified in personal values) are varied in the presentation of stimulus persons, strong elements of the belief component are embedded in the meanings attached to the religion ascribed. If Rokeach is right, ascription of religion rather than race might be expected to have a large effect, in comparison with similarity of belief. In addition, religious membership should be particularly salient for Jewish subjects, and race for Negro subjects, because of the emphasis on these factors in their upbringing. To pit religion and race, respectively, against similarity of belief, as determinants of these subjects' responses to stimulus persons, is thus to test Rokeach's theory of belief prejudice under quite stringent conditions.

#### METHOD

##### *Preparation of Questionnaires*

Each subject received a personally tailored questionnaire built around supposed excerpts from the replies of four teenagers or adults who had allegedly filled out the same research questionnaire



that the subject himself had completed in the eighth grade. Whether the stimulus persons whom any one subject received were teenagers or adults depended upon the form of the questionnaire that the subject had previously filled out. This original questionnaire contained either questions regarding the subject's feelings about teenagers or parallel questions about adults, and subjects at that time had been randomly assigned to receive one form or the other.

The instructions which appeared on the first page of the questionnaire were as follows: (Form A)

As you will probably remember, about a year ago we asked you to answer some questions concerning your interests and attitudes about yourself, your friends, and certain groups of people. You may also recall that there were some questions asking you to give first impressions about people when you knew only a few things about them, such as the person's religion or type of job. We are very much interested in how people form these impressions.

In fact, we would like to know how you would feel about some adults who took a similar questionnaire to the one you answered, but in other parts of the country. Therefore, we have taken some of their answers and presented them on the following pages.

We want you to look at the descriptions of four adults and answer some questions about how you feel toward each of them. It is important that you go through this booklet in order. Do *not* skip ahead, and once you have finished answering questions about a person, do not go back.

If you have any questions, please raise your hand and your teacher will help you. Be sure to read *everything* carefully. And remember, feel free to answer the questions exactly the way you feel, for no one but the research workers at the University of California will see your answers.

The instructions and basic format of the questionnaire follow the plan of the questionnaire used by Stein et al. (1965), with only minor modifications. Stimulus persons were in each case the same sex as the subject. The presentation of each stimulus person contained information about belief, race or religion, and status.

The value items for presenting the belief system of a stimulus adult were as follows:

Do you think people in general *ought* to ...

1. Be loyal to the U.S. more than to any other group or cause.
2. Be interested in doing things in their community; be useful citizens.
3. Be unconcerned with making a great deal of money.
4. Be intelligent and well informed, be able to think clearly about things.
5. Keep their property in good condition; not let things get run down.
6. Have good taste in clothes.

7. Be concerned about other people; *not* be self-centered.
8. Be modest, *not* try to draw attention to themselves.
9. Support movements or groups that are working for equal rights for everyone.
10. Be sincerely religious.
11. Have respect for other people's wishes and beliefs; *not* be bossy.
12. Let everyone have his fair share in running business and politics in this country.
13. Be honest and trustworthy.
14. Be generally friendly and sociable; mix with different kinds of people.
15. Treat other people as equals; *not* be conceited or snobbish.
16. Follow all the rules and laws that have been made by those in authority.
17. Stay in groups or neighborhoods where they are welcome; *not* be "social climbers."
18. Live up to strict moral standards.
19. Be hard working, *not* lazy.
20. Go along with what most others do and stand for; *not* be too different.

These items were followed by five columns of response alternatives headed by "Strongly feel they should" to "Strongly feel they shouldn't" with "Don't care" as the middle point. The experimenter circled the appropriate alternative for each item, as designated by the computer program (see p. 5), to give the subject the impression of the stimulus person's responses to these items.

The information, other than values, provided to describe a stimulus adult was as follows: (Form for Religion)

1. Sex \_\_\_\_\_
2. Age \_\_\_\_\_
3. What is your job called? \_\_\_\_\_
4. How much education did you have?
  - \_\_\_\_\_ some grade school
  - \_\_\_\_\_ finished the 8th grade
  - \_\_\_\_\_ some high school
  - \_\_\_\_\_ graduated from high school
  - \_\_\_\_\_ some college
  - \_\_\_\_\_ graduated from college
  - \_\_\_\_\_ some further education after college
5. What is your religion?
  - \_\_\_\_\_ Protestant \_\_\_\_\_ Catholic
  - \_\_\_\_\_ Jewish \_\_\_\_\_ other \_\_\_\_\_ none

A copy of the complete Form T questionnaire appears in Stein (1965). The factors and their corresponding levels are given as follows:

Race: White versus Negro

Religion: Protestant or Catholic versus Jewish

Belief: Similar values versus dissimilar values

Status: High versus low

The four stimulus persons, who varied in terms of the factors of race and religion, were assigned to each subject following the plan presented in Table 1. Each pair of stimulus persons indicated in the table was composed of one high in status and one low in status.



*Description of stimulus persons: Belief factor.* Each subject had filled out a 20-item value scale concerning "how people ought to be" (Form A) or "how fellow students ought to be" (Form T), as part of the Interest and Attitude questionnaire given when he was in the eighth grade. (For the adult form, see above; for the teenage form, see Stein et al. [1965, p. 283], with the omission of Items 1, 3, 17, 21, and 22 because of small response variance.) An IBM 7090 computer program was written so that each subject's original responses to these items could be presented systematically in such a way as to make two sets that were similar and two that were dissimilar to the subject's original responses. The basic procedure for this program appears in Stein (1965, pp. 94-97; for complete details write to the author). Thus, beliefs were ascribed to the four stimulus persons presented to any given subject on the basis of the subject's own responses to these same items. One of the four stimulus persons was always described with exactly the same responses that the subject originally gave to the items. In order to avoid raising the subject's suspicions, the other like-valued stimulus person was made to differ slightly from the first by changing a few responses one step on the 5-point scale. The two unlike-valued stimulus persons were prepared by making more radical changes, again using the subject's own responses as the reference point. In addition, the program randomly varied the order of the two like-valued patterns and the two unlike-valued patterns.

*Description of stimulus persons: Race or religion and status factors.* The information about race or religion and status was also presented by checks in the appropriate spaces, as if representing questionnaire responses. Each stimulus person was described in terms of *either* race or religion.

For those subjects who responded to the adult form of the questionnaire, occupation and education were used as indexes of status. A "doctor" or "lawyer," randomly interchanged, was combined

with "some further education after college" in the descriptions of high-status males. For low-status males, a "factory worker" and "truck driver" were randomly interchanged, and the amount of education attributed to them was "some grade school." A high-status female was presented as either an "executive secretary" or a "dress designer" with "some further education after college." A low-status female was depicted as a "factory worker" or a "waitress" with an education of "some grade school." Each adult stimulus person was described as either 34 or 36 years old.

All teenage stimulus persons were described as in the ninth grade (same grade as the subjects). Status was indicated by program in school and last year's grade average: "college preparatory" and "getting about a 'B' average" for high status, and "vocational" and "getting below a 'D' average" for low status.

### Experimental Design

Given the variables with which we are concerned, eight possible stimulus persons could be constructed. Excessive time demands (as indicated by a pilot study) made it impractical for each subject to respond to all eight combinations. Therefore, a  $2 \times 2 \times 2$  factorial design in blocks of Size 4 (repeated measures) was employed (Winer, 1962, pp. 409-412). According to this design, the comparisons involving race, for example, are as follows:

One-half of the subjects received the following four stimulus persons:

#### Group I

White, unlike values, lower status  
 Negro, like values, lower status  
 Negro, unlike values, upper status  
 White, like values, upper status

One half of the subjects received the following four stimulus persons:

#### Group II

Negro, unlike values, lower status  
 White, like values, lower status  
 White, unlike values, upper status  
 Negro, like values, upper status

In the comparisons involving religion, Jewish and Protestant or Catholic were substituted for Negro and white, respectively. (See Table 1; note in the religion comparisons that "same versus different" religion is the basis for ascribing religion to the stimulus persons. Thus, Catholic subjects responded to Catholic and Jewish stimulus persons and Protestant subjects responded to Protestant and Jewish stimulus persons.)

Within each subsample (the 24 cells in Table 2), each subject was randomly assigned to Group I or II above and the order of presentation of stimulus persons within both Groups I and II was randomly varied, with the restriction that no two "like-valued" or "unlike-valued" stimulus persons ever appeared consecutively in a questionnaire.

*Dependent variables.* After the description of

TABLE 1  
 ASSIGNMENT OF STIMULUS PERSONS  
 TO SUBJECTS

Membership group of subject	Stimulus persons				
	Jewish	Negro	Prot- estant	Cath- olic	White
Jewish	2	—	2	—	—
Negro	—	2	—	—	2
Half of the white Protestants	2	—	2	—	—
Half of the white Protestants	—	2	—	—	2
Half of the white Catholics	2	—	—	2	—
Half of the white Catholics	—	2	—	—	2



TABLE 2  
SAMPLE (N = 630)

Form of questionnaire		Subjects															
		Jews				Negroes				Protestant				Catholic			
		Adult	Teenage	Adult	Teenage	Adult	Teenage	Adult	Teenage	Adult	Teenage	Adult	Teenage	Adult	Teenage		
Boys	69	84	25	23	12	10	7	18	17	16	13						
Girls	68	88	25	24	15	8	8	18	17	18	19						
Stimulus persons	Jewish and gentile	Jewish and gentile	Negro and white	Negro and white	Negro and white	Jewish and gentile	Negro and white	Jewish and gentile	Negro and white	Jewish and gentile	Negro and white	Jewish and gentile					



(racial or religious) affiliation, sex, and form of the questionnaire, and by the particular stimulus persons who appeared in the subjects' questionnaires. In order to obtain sufficiently large cell entries, subjects were combined across the two junior high schools and Protestants and Catholics were combined (as "gentiles") for most of the analyses.

### *Administration of Questionnaires*

The questionnaires were administered during the subjects' regular class in social studies. The investigator met with the social studies faculty of each school the day before the administration to go over the instructions and to answer any questions. Seven social studies teachers at one of the junior high schools and nine at the other administered the procedure.

Each subject received his questionnaire in a sealed envelope. His name appeared on the envelope but his questionnaire was identified only by a code number. The teachers were told to throw away the envelopes as soon as the students had removed their questionnaires. Subjects were told that the code number was necessary for statistical analyses, that no student would be considered individually or by name, and that only the research workers at the University of California would see their answers.

### RESULTS AND DISCUSSION

The  $2 \times 2 \times 2$  factorial design used for the analysis of the check on the manipulation and for the two dependent variables of liking and social distance can demonstrate only whether or not a given independent variable has a significant effect on the dependent variable. In order to determine whether one treatment effect is significantly greater than another, it is necessary to calculate the proportion of total variance contributed by each treatment effect and then to test for any significant difference between effects.

The index,  $\Omega^2$ , expresses the strength of association between independent and dependent variables in terms of the proportion of total variance accounted for by the treatment effect (Hays, 1963). The  $\Omega^2$  values were computed for each sample and for each treatment effect in the present study. The  $\Omega^2$  values for any two selected factors were then ranked across samples in order of magnitude and White's rank test (Edwards, 1954) was applied to determine whether one factor contributed a significantly greater proportion of the variance than the other. Two-tailed tests were used in all cases.

Throughout the discussion, trends in the differential effect of treatments on related subsamples will be pointed out. Quite often, though, significance tests could not be meaningfully applied to these data since they were based on so few samples.

### *Check on the Manipulation*

The subjects' responses to the question: "How much like you would you say this person is?" served as a check as to whether the stimulus persons appeared like or unlike the subjects as intended. A summary of the 16 analyses of variance for responses to this question appears in Table 3. The main effect of belief accounts for almost all of the variance, contributing significantly more variance than either the race, the religion, or the status effect ( $p < .01$  for all rank-order comparisons). Subjects tended to see themselves as similar or dissimilar to the stimulus persons mainly in terms of belief. Means and standard deviations for many of these analyses are omitted here to conserve space, but are presented in Stein (1965). In this analysis, like-valued persons are perceived as more like the subject than unlike-valued ones.

In the analysis involving the religion variable, the small proportion of variance not accounted for by the belief effect is divided about equally between status and religion. The fact that status effects account for more variance on Form T than on Form A ( $p < .05$  for the rank-order difference) suggests that the status attributes of the stimulus teenagers are more salient to the subjects than the corresponding status attributes of the adult stimulus persons. The two Form A samples for which the status effect was significant are the gentile and Jewish males. This finding seems reasonable since the manipulation of the adult stimulus persons' status may well have been more powerful for males than for females. That is, the difference between "doctor" and "lawyer" on the one hand and between "factory worker" and "truck driver" on the other appears to be greater than that between "dress designer" and "executive secretary" as opposed to "factory worker" and "waitress."

The fact that three of the four Jewish



samples show significant status effects seems in line with the probable stress on this factor in Jewish families. It is common knowledge that middle-class Jewish parents tend to hope that their children will get good grades, go to college, and enter into professions. The high-status stimulus persons are presented as successful in fulfilling such expectations.

The results concerning the religion variable have some interesting implications. In four of the eight relevant samples there was a significant religion effect; whereas in no sample was there a significant race effect ( $p < .05$  for the rank-order difference between  $\Omega^2$  values for religion and race). This fact is in accord with the expectation that there is a meaningful belief component in the ascription of religion. Knowing merely that a person is Protestant, Catholic, or Jewish may imply much about the person's

beliefs. Thus it is not surprising that judgments of similarity are more frequently based at least in part on the religion of the subject than on his race, which implies much less about belief systems.

Friendliness

Table 4 shows the summary of the analyses of variance computed on the responses of the 16 subsamples to the "friendliness" question, intended as a measure of "affect" toward the stimulus person.

As may be seen in the column headed Belief, the belief component of the stimulus individuals accounted for almost all of the variance in responses to this question. The belief effect contributes significantly more variance than either the race, the religion, or the status effects ( $p < .01$  for all rank-order comparisons). In 15 of the 16 samples there was a highly significant be-

TABLE 3  
SUMMARY OF THE 16 ANALYSES OF VARIANCE FOR RESPONSES TO THE QUESTION: HOW MUCH LIKE YOU WOULD YOU SAY THIS PERSON IS? (AS MUCH LIKE ME—AS MUCH UNLIKE ME—6-POINT SCALE)

Sample	Form	N	Race		Belief		Status		Race × Belief	Race × Status	Belief × Status
			F	Prop. of variance	F	Prop. of variance	F	Prop. of variance	F	F	F
Negro males	A	25	.26	.00	17.85****	.10	1.79	.00	.01	.01	.01
Negro females	A	25	.98	.00	66.37****	.39	.10	.00	.58	.01	.01
Gentile males	A	30	1.04	.00	15.26****	.08	4.15*	.02	4.88*	2.88	.72
Gentile females	A	33	.28	.00	135.19****	.47	.03	.00	.03	1.12	.28
Negro males	T	23	.56	.00	31.62****	.21	2.25	.01	.88	4.26	.88
Negro females	T	24	.12	.00	68.84****	.40	7.98***	.04	1.12	.28	1.12
Gentile males	T	26	.12	.00	35.80****	.20	7.93***	.04	.03	2.51	.77
Gentile females	T	26	.08	.00	64.08****	.34	7.12***	.03	1.43	.68	1.43
			Religion		Belief		Status		Religion × Belief	Religion × Status	Belief × Status
Jewish males	A	69	15.82****	.03	148.83****	.28	18.01****	.03	1.42	2.13	.44
Jewish females	A	68	3.08	.00	350.25****	.54	1.05	.00	.02	.08	1.37
Gentile males	A	32	5.15*	.02	48.59****	.24	.24	.00	1.68	.42	.24
Gentile females	A	30	.17	.00	121.88****	.41	2.13	.00	1.08	.04	1.56
Jewish males	T	84	9.20***	.01	151.35****	.26	70.75****	.12	0.0	.40	4.98*
Jewish females	T	88	.24	.00	350.10****	.42	64.02****	.08	.74	.06	10.24***
Gentile males	T	20	3.60	.03	.99	.00	.81	.00	.81	0.0	.88
Gentile females	T	27	9.73***	.05	31.54****	.18	5.79*	.03	.07	.64	2.30

\*  $p = .05$ .  
\*\*\*  $p = .01$ .  
\*\*\*\*  $p = .001$ .



TABLE 4

SUMMARY OF THE 16 ANALYSES OF VARIANCE FOR RESPONSES TO THE QUESTION: IF YOU MET THIS PERSON FOR THE FIRST TIME, WHAT WOULD YOUR IMMEDIATE REACTION BE? (QUITE FRIENDLY—QUITE UNFRIENDLY—5-POINT SCALE)

Sample	Form	N	Race		Belief		Status		Race × Belief	Race × Status	Belief × Status
			F	Prop. of variance	F	Prop. of variance	F	Prop. of variance	F	F	F
Negro males	A	25	2.67	.01	21.96****	.14	.30	.01	.30	.96	.11
Negro females	A	25	3.54	.02	55.34****	.34	.04	.00	.81	.20	.65
Gentile males	A	30	2.06	.00	20.50****	.10	5.38*	.02	5.38*	.01	.11
Gentile females	A	33	.50	.00	80.31****	.34	.82	.00	.25	2.28	.50
Negro males	T	23	.25	.00	23.75****	.17	.01	.00	1.20	2.22	.80
Negro females	T	24	.01	.00	41.54****	.27	.97	.00	2.02	.01	1.44
Gentile males	T	26	.48	.00	38.56****	.21	6.40*	.03	0.0	.85	0.0
Gentile females	T	26	.18	.00	42.58****	.25	4.43*	.02	1.60	.04	.71
			Religion		Belief		Status		Religion × Belief	Religion × Status	Belief × Status
			F	Prop. of variance	F	Prop. of variance	F	Prop. of variance	F	F	F
Jewish males	A	69	10.43***	.02	116.41****	.25	5.78*	.01	1.06	1.36	.57
Jewish females	A	68	1.14	.00	224.59****	.42	1.14	.00	.37	.02	.09
Gentile males	A	32	2.23	.01	26.16****	.17	.15	.00	.15	2.23	.50
Gentile females	A	30	.22	.00	78.92****	.34	.22	.00	.87	1.97	.22
Jewish males	T	84	2.66	.00	113.21****	.22	25.26****	.05	0.0	.96	.96
Jewish females	T	88	.02	.00	229.85****	.36	20.80****	.03	.74	1.23	.74
Gentile males	T	20	.80	.00	9.19****	.08	1.00	.00	7.49***	.62	.02
Gentile females	T	27	3.46	.01	44.56****	.24	5.28*	.02	.97	.59	4.32*

\*  $p = .05$ .

\*\*\*  $p = .01$ .

\*\*\*\*  $p = .001$ .

lief effect ( $p < .001$ ), and the belief effect in the other sample (gentile males, Form T) was significant at better than the .01 level. (Note that this is the same sample for which the manipulation of similarity appeared to be ineffective.)

The results for this sample in all analyses should be viewed with great caution. Of the 16 subsamples in the study, this 1 has the smallest  $N$  (20). Besides, when this sample was divided so that approximately half of the subjects would receive four treatments and the other half of the subjects the other four treatments, the actual split came out to be 13 and 7 instead of the desired 10 and 10 because some subjects were absent or had transferred to another school. The Winer (1962) model assumes an equal number of subjects in each group. If  $N$  is large and the difference between  $N_1$  and  $N_2$  in each group is small, statistical assump-

tions for the model are not seriously violated. Departures from this rule, as in this case, reduce the power of any statistical test that might be applied to the data. The use of a General Linear Hypothesis Model (Biomedical Computer Programs, 1961) is recommended in such cases and was in fact carried out for this sample as well as for the Negro females, Form A ( $N = 25$ ;  $N_1 = 15$ ,  $N_2 = 10$ ). The  $F$  ratios reported in Tables 3, 4, and 9 for these samples were derived by this procedure.

The race effect was not significant in any of the eight samples in which race was varied. The religion effect was significant in only one of the eight samples in which it was tested (Jewish males, Form A). The status effect was significant in 7 out of 16 samples, with generally lower significance levels than those for belief. That is, five of these seven tests for status were significant



only at the .05 level while the other two reached the .001 level. Moreover, rank-order tests between the amount of variance explained by these three factors showed no significant differences.

There are no apparent sex differences on the status factor. Five of the seven samples that showed significant status effects had responded to Form T—a trend paralleling findings previously reported in regard to the effectiveness of the manipulations. Three out of the four Jewish samples show significant status effects although very little variance is contributed by these samples. Only 3 of the 48 tests for two-way interactions were significant, a finding that could easily have arisen by chance, especially since there is no correspondence between the groups showing such interaction effects in this table and in Table 3 concerning the check on the manipulation.

These findings lend strong support to Rokeach's theory. Subjects' affective responses to stimulus persons are much more strongly influenced by ascribed similarity of belief systems than by ascribed religion or race.

#### *Correlational Analysis of Responses to the Friendliness Item*

*Adult Negro stimulus persons.* Essentially the same "friendliness" question had also been asked, in a somewhat different format, on the Interest and Attitude questionnaire, given to the same subjects a year before the present study. At that time, subjects had been asked to respond to a list of many different categories of persons, of which two were "a Negro" (or "a Negro teenager") and "a Jew" (or "a Jewish teenager"). It had been originally hypothesized (Stein et al., 1965, p. 286) that subjects' responses to the Negro teenager should correlate moderately both with responses to a like-valued Negro and an unlike-valued Negro unless, for some reason, subjects have an expectation that Negro teenagers in general are either like them or unlike them in values. The finding that responses to "a Negro teenager" correlated highly with responses to a Negro teenager with unlike values but not with responses to a Negro with like values was of con-

siderable import. Therefore, a similar analysis was carried out in the present study.

Of the 630 subjects, 572 had answered the appropriate items in the previous questionnaire. The 572 subjects represent 16 subsamples, of which 4 each responded to "a Negro," "a Negro teenager," "a Jew," and "a Jewish teenager."

In the study by Stein et al., mean responses to "a Negro teenager" fell between the means for the other two experimentally presented stimulus teenagers. It seemed reasonable that subjects should feel friendliest toward a Negro with like values, followed by the unspecified "Negro teenager," and finally by the least preferred stimulus teenager, the Negro with unlike values. One might expect similar outcomes among the subsamples in the present study unless the subjects are affected by the addition of status as a variable rather than as a constant in the description of like- and unlike-valued stimulus persons, or by the fact that stimulus adults elicit different responses than stimulus teenagers, or unless Negro and Jewish subjects respond differently from white gentile subjects. A further difference is the fact that a year intervened between administrations of the questionnaires in the present study, as compared with only 2 months in the former one.

Table 5 summarizes the results for the subjects in the four samples who responded to "a Negro" (Form A). In the column headed  $\bar{X}$ , the first six means reflect the responses of Negro subjects who received Form A. For each of these two samples "a Negro" is the most preferred stimulus person, although these means are not significantly different from those for the like-valued Negro of either upper or lower status. Since these are Negro subjects, and this score was taken from the previous questionnaire when the "Negro" was embedded in a list of other stimulus persons, the salience of the Negro stimulus was apparently increased and the subjects responded quite favorably. Means for "a Negro" and the like-valued Negro are both significantly different from the means for the unlike-valued Negro. These results, therefore, are consistent with find-



TABLE 5

ANALYSIS OF RESPONSES ON THE "FRIENDLINESS" ITEM TOWARDS NEGRO ADULT STIMULUS PERSONS

Sample <sup>a</sup>	N	Stimulus persons	$\bar{X}^c$	$\sigma^2$	Comparison	r	t between means	t between $\sigma^2$
Negro	23	Negro-unlike values—lower status	2.4	1.69	Negro-unlike values—lower status Negro-like values—upper status	-.15	2.66**	3.05***
		Negro-like values—upper status	1.5	.49	Negro-unlike values—lower status A Negro <sup>b</sup>	.17	3.32***	3.06***
		A Negro <sup>b</sup>	1.4	.49	Negro-like values—upper status A Negro <sup>b</sup>	.41	0.53	0.0
Negro	23	Negro-like values—lower status	1.4	.36	Negro-like values—lower status Negro-unlike values—upper status	.14	4.14***	2.47*
		Negro-unlike values—upper status	2.4	1.0	Negro-like values—lower status A Negro <sup>b</sup>	-.05	0.44	0.0
		A Negro <sup>b</sup>	1.3	.36	Negro-unlike values—upper status A Negro <sup>b</sup>	-.08	4.09****	2.45*
Gentile	28	Negro-unlike values—lower status	2.9	.81	Negro-unlike values—lower status Negro-like values—upper status	.50***	4.53***	0.0
		Negro-like values—upper status	2.1	.81	Negro-unlike values—lower status A Negro <sup>b</sup>	-.10	2.54**	1.04
		A Negro <sup>b</sup>	2.2	1.21	Negro-like values—upper status A Negro <sup>b</sup>	-.28	0.23	1.07
Gentile	28	Negro-like values—lower status	1.9	.81	Negro-like values—lower status Negro-unlike values—upper status	-.41*	1.95	1.13
		Negro-unlike values—upper status	2.6	1.21	Negro-like values—lower status A Negro <sup>b</sup>	.22	0.82	0.0
		A Negro <sup>b</sup>	2.1	.81	Negro-unlike values—upper status A Negro	.05	1.72	1.03

<sup>a</sup> Each sample involves different subjects: boys and girls are combined.<sup>b</sup> From questionnaire given when students were in the eighth grade.<sup>c</sup> A low score indicates greater friendliness toward the stimulus person.\*  $p < .05$ .\*\*  $p < .02$ .\*\*\*  $p < .01$ .\*\*\*\*  $p < .001$ .



ings in the former study. However, none of the correlations between responses to the possible combinations of stimulus persons is significant.

The final six means in the  $\bar{X}$  column in Table 5 represent responses of the two "gentile" samples. Here the means are ordered as predicted, but responses to the unlike-valued Negro stimulus persons are significantly different from those to the other two stimulus persons for only the first gentile sample. In addition, two significant correlations emerge, neither of which was predicted. A correlation of .50 ( $p < .01$ ) between an unlike-valued Negro of lower status and a like-valued Negro of upper status does not make any apparent sense. Likewise in the other gentile sample, a correlation of  $-.41$  ( $p < .05$ ) between a like-valued Negro of lower status and an unlike-valued Negro of upper status is not readily interpretable.

*Teenage Negro stimulus persons.* Table 6 presents the results for subjects in the four samples who responded to a "Negro teenager" in addition to the experimentally presented Negro teenage stimulus persons. The two gentile samples in Table 6 provide a replication of the corresponding analysis in the study by Stein et al. (1965). The first six means under the column headed  $\bar{X}$  represent the responses of two Negro samples. These subjects again show greatest friendliness toward "a Negro teenager" rather than to the like-valued Negro; the only mean difference that is *not* significant is between "a Negro teenager" and "Negro-like values—upper status." These results, then, are essentially consistent with the findings for the Negro subjects who took Form A. The one significant correlation obtained for these two Negro samples is .52 ( $p < .02$ ) between responses to "a Negro teenager" and to a like-valued Negro of lower status. Although this result was not specifically predicted, it seems to make sense. Negro subjects responded to "a Negro teenager" in much the same way as they did to a Negro who is like them in values and has lower status. Since the Negro subjects themselves come mainly from lower class fami-

lies, the attributes of this stimulus person actually resemble their own most closely.

The last six means under the column  $\bar{X}$  in Table 6 present the scores for the two gentile samples who responded to "a Negro teenager." For both samples, the means are ordered as predicted, although in the second sample, the unlike-valued Negro is not significantly different from the "Negro teenager." It seems remarkable that these means order as predicted in almost all samples considering that a year separated the responses to "a Negro teenager," and the other stimulus individuals. The only significant correlation that emerges is one of .53 ( $p < .01$ ) between responses to "a Negro teenager" and an unlike-valued Negro of lower status, a result in good accord with the rationale underlying the earlier findings, given the addition of status as a new variable, and the substantial exposure of the present samples (unlike the sample of the previous study) to Negroes, who were predominantly from lower class backgrounds.

The fact that significant interpretable correlations were obtained with Form T but not with Form A suggests that both Negro and gentile samples found it more meaningful to respond to stimulus teenagers than to stimulus adults.

*Adult Jewish stimulus persons.* A similar correlational analysis was carried out for responses to the Jewish stimulus persons. In the results for Form A (Table 7), the first six means under the column headed  $\bar{X}$  are the responses for two Jewish samples. There are significant mean differences between responses to "a Jew" and a like-valued Jew of either upper or lower status, on the one hand, and to an unlike-valued Jew of upper or lower status, on the other. The only correlation that is significant is one between "a Jew" and a Jew with unlike values and upper status ( $r = .30$ ,  $p < .01$ ). This finding is unexpected, and no explanation is offered.

The mean responses for the two gentile samples (last six means of Table 7) are in the order predicted, with greatest friendliness exhibited toward a like-valued Jew, followed by "a Jew," and finally by



TABLE 6

ANALYSIS OF RESPONSES ON THE "FRIENDLINESS" ITEM TOWARDS NEGRO TEENAGER STIMULUS PERSONS

Sample <sup>a</sup>	N	Stimulus person	$\bar{X}^c$	$\sigma^2$	Comparison	r	t between means	t between $\sigma^2$
Negro	19	Negro-unlike values—lower status	3.1	1.44	Negro-unlike values—lower status Negro-like values—upper status	.32	6.34****	3.26***
		Negro-like values—upper status	1.4	.36	Negro-unlike values—lower status A Negro teenager <sup>b</sup>	.26	6.35****	3.20***
		A Negro teenager <sup>b</sup>	1.3	.36	Negro-like values—upper status A Negro teenager <sup>b</sup>	.45	0.37	0.0
Negro	23	Negro-like values—lower status	1.8	1.0	Negro-like values—lower status Negro-unlike values—upper status	.20	3.62***	1.60
		Negro-unlike values—upper status	3.0	1.96	Negro-like values—lower status A Negro teenager <sup>b</sup>	.52**	3.21***	4.01****
		A Negro teenager <sup>b</sup>	1.3	.25	Negro-unlike values—upper status A Negro teenager <sup>b</sup>	.06	5.62****	5.61****
Gentile	23	Negro-unlike values—lower status	3.1	1.44	Negro-unlike values—lower status Negro-like values—upper status	.24	6.08****	3.54****
		Negro-like values—upper status	1.6	.36	Negro-unlike values—lower status A Negro teenager <sup>b</sup>	.53***	2.42*	0.47
		A Negro teenager <sup>b</sup>	2.6	1.21	Negro-like values—upper status A Negro teenager <sup>b</sup>	.00	3.54***	2.95
Gentile	27	Negro-like values—lower status	2.2	1.0	Negro-like values—lower status Negro-unlike values—upper status	.32	2.10*	0.0
		Negro-unlike values—upper status	2.7	1.0	Negro-like values—lower status A Negro teenager <sup>b</sup>	.23	1.66	0.0
		A Negro teenager <sup>b</sup>	2.6	1.0	Negro-unlike values—upper status A Negro teenager <sup>b</sup>	.28	0.23	0.0

<sup>a</sup> Each sample involves different subjects; boys and girls are combined.<sup>b</sup> From questionnaire given when students were in the eighth grade.<sup>c</sup> A low score indicates greater friendliness toward the stimulus person.\*  $p < .05$ .\*\*  $p < .02$ .\*\*\*  $p < .01$ .\*\*\*\*  $p < .001$ .



TABLE 7  
ANALYSIS OF RESPONSES ON THE "FRIENDLINESS" ITEM TOWARDS JEWISH ADULT STIMULUS PERSONS

Sample <sup>a</sup>	N	Stimulus person	$\bar{X}^c$	$\sigma^2$	Comparison	r	t between means	t between $\sigma^2$
Jewish	56	Jewish-unlike values—lower status	2.8	.81	Jewish-unlike values—lower status Jewish-like values—upper status	-.13	7.63****	1.88
		Jewish-like values—upper status	1.6	.49	Jewish-unlike values—lower status A Jew <sup>b</sup>	.09	8.06****	1.87
		A Jew <sup>b</sup>	1.6	.49	Jewish-like values—upper status A Jew <sup>b</sup>	.09	0.27	0.0
Jewish	63	Jewish-like values—lower status	1.7	.49	Jewish-like values—lower status Jewish-unlike values—upper status	-.16	5.48****	3.70****
		Jewish-unlike values—upper status	2.7	1.21	Jewish-like values—lower status A Jew <sup>b</sup>	.08	0.0	1.05
		A Jew <sup>b</sup>	1.7	.64	Jewish-unlike values—upper status A Jew <sup>b</sup>	.30***	6.74	2.65**
Gentile	31	Jewish-unlike values—lower status	2.7	.64	Jewish-unlike values—lower status Jewish-like values—upper status	.19	6.34****	0.74
		Jewish-like values—upper status	1.5	.49	Jewish-unlike values—lower status A Jew <sup>b</sup>	-.08	2.84****	1.22
		A Jew <sup>b</sup>	2.0	1.0	Jewish-like values—upper status A Jew <sup>b</sup>	.29	2.45*	2.05*
Gentile	24	Jewish-like values—lower status	1.9	.64	Jewish-like values—lower status Jewish-unlike values—upper status	.09	5.29****	1.52
		Jewish-unlike values—upper status	3.3	1.21	Jewish-like values—lower status A Jew <sup>b</sup>	.70***	1.77	2.13*
		A Jew <sup>b</sup>	2.2	1.21	Jewish-unlike values—upper status A Jew <sup>b</sup>	-.18	3.29***	0.0

<sup>a</sup> Each sample involves different subjects; boys and girls are combined.

<sup>b</sup> From questionnaire given when students were in the eighth grade.

<sup>c</sup> A low score indicates greater friendliness toward the stimulus person.

\*  $p < .05$ .

\*\*  $p < .02$ .

\*\*\*  $p < .01$ .

\*\*\*\*  $p < .001$ .



an unlike-valued Jew. A sizable correlation of .70 ( $p < .001$ ) occurs between "a Jew" and a Jew with like values and lower status. Again, no explanation is offered for these unpredicted results—unexpected because the Jewish students in this school system come from predominantly upper-middle-class backgrounds.

*Teenage Jewish stimulus persons.* The analysis of responses to the Jewish teenager stimulus persons appears in Table 8. For the first six means, "a Jewish teenager" receives the most friendly responses for the two Jewish samples. This finding parallels a corresponding result for the Negro sample and can probably be accounted for by the salience to Jewish students of the Jewish stimulus as embedded in the list of other categories of persons presented for reaction in the original Teenage Interest and Attitude Questionnaire. Only in the second sample are responses to "a Jewish teenager" significantly different from those to the like-valued Jew. But in both samples, responses to the unlike-valued Jew differ significantly from those to both of the other two stimulus teenagers, a finding similar to those obtained in the other samples. No significant correlations appear. The two gentile samples have means that follow the expected order, but in the second sample the only significant difference is that between the Jew with like values and lower status and the unlike-valued Jew. A correlation of .41 ( $p < .05$ ) occurs between responses to the unlike-valued Jew of lower status and the like-valued Jew of upper status. This correlation is almost the same as that for the equivalent pair of Negro adult stimuli. Again, no explanation is offered to account for it.

The correlational data for the Jewish stimulus persons fail to confirm the predictions generally verified in the analyses of the data concerning Negro stimulus persons. Gentile subjects are more prone to express friendliness towards otherwise undescribed Jewish stimulus persons than toward Negro stimulus persons. The interpretation by Stein et al. (1965) with regard to assumed dissimilar belief systems is thus confirmed only for the single

analysis that exactly replicates the former study—that for teenager Negro stimulus persons; gentile subjects tend to respond to an otherwise undescribed Negro teenager in the same manner as they do to a Negro who is unlike them in values and has lower status.

### *Total Social Distance Scale*

Among our measures the 10-item social distance scales are probably the best indicators of the subjects' willingness to engage socially in real-life situations with persons similar to the stimulus persons. Total scores on the scales were obtained by summing responses to the ten items, each scored 1 for "Yes" and 0 for "No." Scalogram analyses with other data showed that the social distance scales form very highly reproducible Guttman scales. If the subject omitted no more than three responses to a scale, a "Yes" or "No" response was randomly assigned to each omitted item to facilitate computer analyses. Sixty-one subjects failed to answer enough of the questions basic to the present study and were therefore deleted from the analysis. A separate analysis of the individual items of the social distance scales will be presented in the next section.

A summary of the 16 analyses of variance for responses to the Total Social Distance scales appears in Table 9. In the column headed Belief, it can be seen that similarity of values again accounts for the greatest proportion of variance, accounting for significantly more variance than either the race, the religion, or the status effect ( $p < .01$  for all rank-order differences). The belief effect is significant in 15 of the 16 samples at  $p \leq .001$ ; in the remaining sample (gentile males, Form T, Religious Comparison) the belief effect is significant at  $p < .05$ . For the samples of all three ethnic groups, the belief effect accounts for significantly more variance among girls than among boys (rank-order difference at  $p < .01$ ).

For the first time in the analyses reported here, race appears to have a systematic influence on subjects' responses, although the amount of variance controlled by the race effect is small. Race was var-



TABLE 8  
ANALYSIS OF RESPONSES ON THE "FRIENDLINESS" ITEM TOWARDS JEWISH TEENAGER STIMULUS PERSONS

Sample <sup>a</sup>	N	Stimulus person	$\bar{X}^c$	$\sigma^2$	Comparison	r	t between means	t between $\sigma^2$
Jewish	81	Jewish-unlike values—lower status	3.1	.81	Jewish-unlike values—lower status Jewish-like values—upper status	-.13	11.26****	2.28*
		Jewish-like values—upper status	1.5	.49	Jewish-unlike values—lower status A Jewish teenager <sup>b</sup>	.12	13.76****	3.73****
		A Jewish teenager <sup>b</sup>	1.4	.36	Jewish-like values—upper status A Jewish teenager <sup>b</sup>	.18	0.51	1.40
Jewish	78	Jewish-like values—lower status	2.0	.81	Jewish-like values—lower status Jewish-unlike values—upper status	-.04	5.55****	1.76
		Jewish-unlike values—upper status	2.9	1.21	Jewish-like values—lower status A Jewish teenager <sup>b</sup>	-.08	2.72***	1.03
		A Jewish teenager <sup>b</sup>	1.6	.64	Jewish-unlike values—upper status A Jewish teenager <sup>b</sup>	.12	8.93****	2.85***
Gentile	26	Jewish-unlike values—lower status	3.2	1.0	Jewish-unlike values—lower status Jewish-like values—upper status	.41*	7.02****	1.96
		Jewish-like values—upper status	1.8	.49	Jewish-unlike values—lower status A Jewish teenager <sup>b</sup>	.03	3.01***	0.0
		A Jewish teenager <sup>b</sup>	2.3	1.0	Jewish-like values—upper status A Jewish teenager <sup>b</sup>	.28	2.31*	1.86
Gentile	19	Jewish-like values—lower status	1.8	.36	Jewish-like values—lower status Jewish-unlike values—upper status	-.18	2.31*	2.24*
		Jewish-unlike values—upper status	2.5	1.0	Jewish-like values—lower status A Jewish teenager <sup>b</sup>	.29	1.30	2.30*
		A Jewish teenager <sup>b</sup>	2.1	1.0	Jewish-unlike values—upper status A Jewish teenager <sup>b</sup>	-.05	1.07	0.0

<sup>a</sup> Each sample involves different subjects; boys and girls are combined.  
<sup>b</sup> From questionnaire given when students were in the eighth grade.  
<sup>c</sup> A low score indicates greater friendliness toward the stimulus person.  
\*  $p < .05$ .  
\*\*  $p < .02$ .  
\*\*\*  $p < .01$ .  
\*\*\*\*  $p < .001$ .



ied in eight samples, in four of which there were significant race effects. Three of these four were gentile samples and the other was Negro females, Form A. An examination of the mean scores on the Total Social Distance scale to each of the eight treatments shows that this Negro sample favors Negro to white stimulus persons. The three gentile samples favor white to Negro stimulus persons. Since the social distance scale is designed to assess subjects' commitment to interact with the stimulus persons rather than just feel friendly or unfriendly toward them, race might be expected to play a more important role here than in the case of the "friendliness" item.

As can be seen in the column headed Religion in Table 9, significant effects for religion appear in five of the eight samples in which religion was varied. In four of these five, the effect is significant at only

the .05 level and in the other, at the .01 level. It is apparent, however, that the religion effect, like the race effect, contributes a negligible proportion of variance. Nonetheless, religious affiliation becomes important when behavioral commitment rather than diffuse expression of friendliness is involved. The appearance of significant religion effects does not depend systematically on the sex of the respondent or on the Form (A or T) of the questionnaire administered. Note, however, that three of the five samples that showed significant effects for religion were Jewish subjects. It is somewhat reasonable to say that religious membership is particularly salient for Jews, both because of their "minority" status and because of the emphasis on the Jewish way of life in most Jewish homes. This fact may also in part explain why Jewish samples showed particularly strong belief effects; many of the items in the

TABLE 9

SUMMARY OF THE 16 ANALYSES OF VARIANCE FOR RESPONSES TO THE TOTAL SOCIAL DISTANCE SCALE

Sample	Form	N	Race		Belief		Status		Race × Belief	Race × Status	Belief × Status
			F	Prop. of variance	F	Prop. of variance	F	Prop. of variance	F	F	F
Negro males	A	25	2.19	.01	24.49****	.13	.95	.00	.14	.14	0.0
Negro females	A	25	11.67***	.03	126.30****	.33	.04	.00	6.63*	.71	7.96***
Gentile males	A	30	26.42****	.12	16.20****	.07	12.58****	.05	4.46*	2.17	.84
Gentile females	A	33	1.15	.00	88.34****	.30	.31	.00	3.73	2.80	1.34
Negro males	T	23	.18	.00	21.51****	.15	3.24	.02	.42	3.53	2.98
Negro females	T	24	.73	.00	51.36****	.30	1.97	.01	1.02	1.75	1.96
Gentile males	T	26	4.37*	.01	44.64****	.19	17.92****	.07	0.0	5.75*	2.83
Gentile females	T	26	9.07***	.04	37.32****	.20	4.63*	.02	2.67	.90	17.77****
			Religion		Belief		Status		Religion × Belief	Religion × Status	Belief × Status
			F	Prop. of variance	F	Prop. of variance	F	Prop. of variance	F	F	F
Jewish males	A	69	6.51*	.01	123.95****	.22	25.12****	.04	.40	.56	.32
Jewish females	A	68	5.48*	.01	236.15****	.35	1.16	.00	.48	.48	.04
Gentile males	A	32	5.38*	.02	61.02****	.28	.03	.00	.06	.80	.15
Gentile females	A	30	0.0	.00	65.63****	.26	3.37	.01	2.74	.16	.05
Jewish males	T	84	5.27*	.01	116.84****	.19	55.59****	.09	.72	2.16	2.16
Jewish females	T	88	1.17	.00	215.93****	.30	56.67****	.08	.60	3.44	7.75***
Gentile males	T	20	.98	.00	6.27*	.06	.23	.00	2.74	.36	.20
Gentile females	T	27	7.99***	.04	34.32****	.19	9.44***	.05	.89	.20	5.08*

\*  $p < .05$ .\*\*\*  $p < .01$ .\*\*\*\*  $p < .001$ .

value scale reflect important concepts and ideas in the Jews' cultural and religious upbringing.

The final factor to be examined is status. In the comparisons involving race, belief, and status, status effects were significant in three of the eight samples. These three are all gentile samples (male Form A,  $p < .001$ ; male,  $p < .001$  and female,  $p < .05$ , Form T). In these samples, stimulus persons of high status are preferred to those of low status, although the proportion of variance contributed by the status effect is again minimal. In none of the four Negro samples was the status effect significant. No obvious explanation from Rokeach's theory is at hand as to why status should be more important for gentile than for Negro subjects. It may be that Negroes minimize the importance of status because of their limited opportunities to obtain high status.

The influence of status in analyses in which it is pitted against religious affiliation is no greater than in those in which it is pitted against race. (The rank-order difference between  $\Omega^2$  values for both status effects is not significant.) The status effect in the religious comparisons is significant in four out of eight samples. In the three of these four (all of which are Jewish samples) it is significant at  $p \leq .001$  and in the other, at  $p \leq .01$  (gentile females, Form T). Perhaps the relatively greater importance of status for Jewish samples may be understood in terms of the integral part that status attributes play in the value system held by upper-middle-class Jews, such as these subjects.

Seven of the 48 two-way interactions were significant. Four of these seven involve the Belief  $\times$  Status interaction, and three of the four involve subjects who took Form T (see Table 9). A look at the mean responses to the various stimulus persons for these samples shows that when low status is ascribed to stimulus persons, similarity of values is essentially unrelated to subjects' responses. On the other hand, subjects tend to respond more favorably to a stimulus person of high status and like values than to one of high status and un-

like values. The other three significant interactions are for Race  $\times$  Belief (Negro females and gentile males, Form A) and Race  $\times$  Status (gentile males, Form T). For both Race  $\times$  Belief interactions, when unlike values are ascribed to stimulus persons, race is unrelated to subjects' responses. But when like values are ascribed to stimulus persons, the Negro sample preferred Negro to white stimulus persons and the gentile sample preferred white to Negro stimulus persons. In the Race  $\times$  Status interaction, when lower status is attributed to stimulus persons race is unrelated to subjects' responses. When upper status, however, is ascribed to stimulus persons, subjects react more favorably to white than to Negro stimulus persons.

No interpretation is offered for these interactions, which appear to reflect complicated relationships between race, religion, and socioeconomic status of the subjects and the variety of meanings attached to potential associations with minority group members in a wide range of social situations. A separate analysis of the individual items on the social distance scale was undertaken to discover what some of these relationships might be.

#### *Analysis of Individual Social Distance Items*

Since subjects responded dichotomously (Yes or No) to the individual social distance items, the analysis of variance is inappropriate for these data. In order to present relevant comparisons for inspection, the percentage of endorsement for each level of each factor has been computed. The means and standard deviations for responses to the individual items of the social distance scale for the several stimulus persons, forms, and samples appear in Stein (1965, pp. 149-180). For a given item on the social distance scale, the total number of "Yes" responses to the four white stimulus persons was divided by the number of subjects responding to these stimulus persons, to obtain the absolute percentage of endorsement given to all white stimulus persons. This



process was repeated for responses to the four Negro stimulus persons, like-valued stimulus persons, etc. Looking at the first cell in Row one of Table 10, for example, we can say that for this sample of 25 Negro males, 84% of all responses to the four white stimulus persons were "Yes"; that is, subjects express themselves as quite willing to have a white stimulus person as a neighbor.

Tables 10 and 11 illustrate the absolute percentages for both Forms A and T. Since Tables 12 and 13 present the percentage difference between the two levels of each factor, these tables will be discussed in detail. The absolute percentage tables are presented in order to give an idea of the frequency with which items were endorsed. In general, the more intimate the social situation, the less frequently the item is endorsed.

Tables 12 and 13 show the percentage difference between the two levels of each of the three factors: race (or religion), belief, and status, on Forms A and T, respectively. These percentages were calculated by taking the difference between the two absolute percentages for the two levels of each factor (Tables 10 and 11). The percentage responding "Yes" to Negro stimulus persons was subtracted from the corresponding percentage for white stimulus persons, and also for unlike values versus like values, lower status versus upper status, and Jew versus Protestant or Catholic. Thus, the resultant percentage, if positive, reflects a preponderance of positive responses to white, like-valued, upper status, Protestant or Catholic stimulus individuals, respectively; and if negative, a corresponding preponderance of positive responses to Negro, unlike-valued, lower status, or Jewish stimulus individuals. For example, the percentage difference of  $-1$  in the upper left cell in Table 12 means that 1% more positive responses were made to Negro than to white stimulus persons: the difference between the first two cells in Row 1 of Table 10 (84% and 85%). Sign tests were computed to test for differences between responses to the levels of a given factor and for sex dif-

ferences. All values reported in this section are based on sign tests.

Table 12 presents the results for Form A for both racial and religious comparisons. A look at the columns headed Belief shows that the percentage differences are on the whole large and positive. In the comparisons involving Negro and white stimulus persons, belief appears to be as important with respect to items that identify casual situations as it does for items that identify more intimate ones.

With respect to differences associated with the race of the stimulus persons, among the two gentile samples, female subjects appear to be more tolerant racially than males. A sign test for this sex difference is significant at  $p < .01$ . For the gentile males, the percentage differences are moderately large and all positive; the males clearly tend to prefer white stimulus persons to Negroes ( $p < .01$ ). In fact, none of the gentile male subjects would be willing to have a close relative marry any of the Negro stimulus persons (see Table 10). For the Negro samples, Table 12 tells a somewhat different story. Negro subjects prefer Negro stimulus persons to white for all items ( $p < .01$ ), but the negative percentage differences are all relatively small. We also see in Table 12 that gentile subjects, particularly males, generally prefer high-status stimulus persons to low when status is pitted against race and belief. High is preferred to low status by both males and females ( $p < .01$ ), but the difference is significant only for males. The two Negro samples show moderate preference for high- rather than low-status stimulus persons although the difference is not significant, and contrary to the results for the gentile samples, there is no significant sex difference.

The bottom half of Table 12 shows the results for the comparisons involving religion, belief, and status (Form A). With regard to religion, gentile males were more likely to reject Jews than were gentile females ( $p < .01$ ). The percentage differences for religion are all quite small, but gentile females even show a net preference

TABLE 10

ABSOLUTE PERCENTAGES OF "YES" RESPONSES TO THE INDIVIDUAL ITEMS OF THE SOCIAL DISTANCE SCALE FOR EACH FACTOR LEVEL OF RACE (WHITE, NEGRO) OR RELIGION (PROTESTANT, CATHOLIC, JEWISH), BELIEF (LIKE VALUES, UNLIKE VALUES), AND STATUS (UPPER, LOWER), ADULT FORM

Item on social distance scale	Negro males <i>N</i> = 25						Negro females <i>N</i> = 25						Gentile males <i>N</i> = 30						Gentile females <i>N</i> = 33					
	W	N	LV	UV	US	LS	W	N	LV	UV	US	LS	W	N	LV	UV	US	LS	W	N	LV	UV	US	LS
Race × Belief × Status comparisons																								
Neighbor on street	84	85	100	68	88	80	72	77	93	57	71	79	88	62	78	72	83	67	76	65	91	50	71	69
Work on charity drive	67	70	88	49	75	62	56	60	78	38	60	56	67	63	78	52	72	58	66	76	91	51	66	76
Speaking acquaintance	76	79	85	71	83	72	65	79	86	58	72	72	73	62	78	57	77	58	74	76	84	65	71	78
Go to party	67	82	84	64	78	71	56	76	80	52	61	71	82	58	73	67	78	62	69	67	78	62	67	69
Member of social club	61	66	78	49	68	59	51	59	81	29	58	52	63	43	67	40	63	43	56	62	80	38	60	57
Live in same apartment house	80	83	86	77	83	80	73	77	87	63	78	72	78	58	67	70	72	65	80	66	85	62	75	71
Close personal friend	62	68	82	47	64	65	36	53	73	13	41	46	55	40	60	35	53	42	32	33	54	10	36	29
Invite home to dinner	66	80	84	62	74	72	52	70	82	40	63	58	68	40	63	45	67	42	42	34	60	17	40	36
Have close relative marry	33	49	47	35	43	39	25	33	44	14	29	29	47	0	35	12	28	18	30	12	33	9	27	15
Share an apartment with	36	43	51	28	37	43	23	42	52	12	29	36	33	13	32	15	28	18	27	22	45	4	27	23
Religion × Belief × Status Comparisons	Jewish males <i>N</i> = 69						Jewish females <i>N</i> = 68						Gentile males <i>N</i> = 32						Gentile females <i>N</i> = 30					
	P	J	LV	UV	US	LS	P	J	LV	UV	US	LS	P/C	J	LV	UV	US	LS	P/C	J	LV	UV	US	LS
Neighbor on street	81	86	93	74	89	78	83	84	98	69	84	84	79	67	88	59	74	72	83	90	100	73	87	86
Work on charity drive	72	74	86	60	72	74	72	74	90	56	72	74	72	59	78	54	64	67	67	70	87	50	67	70
Speaking acquaintance	78	82	88	72	88	71	80	83	94	68	85	78	70	60	84	45	63	66	81	85	94	73	87	80
Go to party	82	82	88	76	93	71	82	90	96	76	87	85	83	84	91	76	80	87	78	87	90	74	87	78
Member of social club	57	70	78	50	70	57	66	71	90	47	71	66	66	56	81	42	63	60	61	62	80	44	63	61
Live in same apartment house	80	82	91	72	85	78	80	84	92	73	82	82	75	69	83	61	70	74	73	78	85	67	78	74
Close personal friend	46	54	74	25	56	43	39	41	71	10	42	38	53	38	76	15	46	45	43	36	62	16	45	34
Invite home to dinner	59	67	78	47	71	55	58	60	84	35	60	58	55	42	73	24	48	49	55	50	73	31	60	44
Have close relative marry	33	50	58	25	47	36	26	46	53	19	38	34	38	22	46	14	34	25	38	29	47	19	41	25
Share an apartment with	34	37	54	17	43	28	30	35	54	11	34	32	35	22	48	9	33	24	30	14	41	8	30	19

Note.—W = White J = Jewish P/C = Protestant/Catholic  
N = Negro P = Protestant Protestant subjects received  
LV = Like values Protestant stimulus persons  
UV = Unlike values Catholic subjects received  
US = Upper status Catholic stimulus persons  
LS = Lower status



TABLE 11

ABSOLUTE PERCENTAGES OF "YES" RESPONSES TO THE INDIVIDUAL ITEMS OF THE SOCIAL DISTANCE SCALE FOR EACH FACTOR LEVEL OF RACE (WHITE, NEGRO) OR RELIGION (PROTESTANT, CATHOLIC, JEWISH), BELIEF (LIKE VALUES, UNLIKE VALUES), AND STATUS (UPPER, LOWER), TEENAGE FORM

Items on social distance scale	Negro males <i>N</i> = 23						Negro females <i>N</i> = 24						Gentile males <i>N</i> = 26						Gentile females <i>N</i> = 26					
	W	N	LV	UV	US	LS	W	N	LV	UV	US	LS	W	N	LV	UV	US	LS	W	N	LV	UV	US	LS
Race × Belief × Status comparisons																								
Sit next to in class	76	70	83	63	82	64	74	77	95	56	77	74	78	74	88	65	86	67	79	81	90	69	83	77
Work on committee with	68	48	77	39	66	50	60	60	83	38	69	51	55	69	76	48	77	47	63	65	81	48	75	54
Speaking acquaintance	56	50	68	39	58	48	62	68	78	52	68	62	65	74	82	56	75	64	69	79	86	62	81	67
Go to party to which person was invited	71	74	85	61	73	72	75	74	87	53	67	72	76	62	78	60	76	62	79	50	79	50	63	65
Eat lunch with	67	70	85	52	70	67	60	55	80	35	57	58	73	66	84	55	79	60	73	44	77	40	60	58
Member of social group	50	61	70	41	61	50	47	55	74	29	55	47	60	58	75	43	64	54	54	42	69	27	52	44
Live in same apartment house	59	53	66	46	59	52	79	68	87	59	78	68	64	46	64	45	59	51	75	38	58	56	60	54
Close personal friend	48	43	56	34	50	41	30	38	49	18	41	27	36	40	55	21	46	31	36	25	48	13	38	23
Invite home to dinner	43	46	59	30	50	39	44	53	70	27	55	41	44	29	48	25	48	25	40	21	44	17	36	25
Date brother (sister)	32	35	46	22	41	26	32	45	60	17	41	36	41	0	28	13	26	15	27	15	33	10	29	13
	Jewish males <i>N</i> = 84						Jewish females <i>N</i> = 88						Gentile males <i>N</i> = 20						Gentile females <i>N</i> = 27					
	P	J	LV	UV	US	LS	P	J	LV	UV	US	LS	P/C	J	LV	UV	US	LS	P/C	J	LV	UV	US	LS
Religion × Belief × Status comparisons																								
Sit next to in class	81	86	90	76	91	76	85	88	93	81	93	81	85	67	87	65	76	76	88	76	91	74	92	72
Work on committee with	65	71	82	55	83	53	66	64	83	48	77	53	54	54	64	43	60	48	68	58	80	46	74	52
Speaking acquaintance	82	82	92	73	85	79	85	86	95	76	90	81	74	76	83	67	87	63	74	71	85	59	78	67
Go to party to which person was invited	80	87	91	76	89	78	81	78	92	68	84	76	82	75	87	69	73	84	83	72	91	65	85	70
Eat lunch with	74	76	88	61	80	69	61	64	85	41	70	56	62	58	69	50	60	60	72	71	84	59	76	67
Member of social group	60	65	78	46	73	52	53	60	78	35	66	46	54	59	71	43	50	63	55	46	67	35	54	48
Live in same apartment house	77	84	88	75	85	77	82	87	89	80	87	82	74	69	78	65	74	69	81	61	74	68	72	71
Close personal friend	39	42	61	20	53	28	33	36	61	8	48	22	45	22	39	28	32	35	48	30	54	24	50	28
Invite home to dinner	45	49	66	28	57	37	46	47	72	22	57	37	40	30	38	32	32	37	55	36	65	26	52	39
Date brother (sister)	29	42	48	23	48	24	32	39	53	18	49	22	30	24	34	21	38	17	45	26	52	18	45	26

Note.—W = White J = Jewish P/C = Protestant/Catholic  
N = Negro P = Protestant Protestant subjects received  
LV = Like values Protestant stimulus persons  
UV = Unlike values Catholic subjects received  
US = Upper status Catholic stimulus persons  
LS = Lower status

TABLE 12  
PERCENTAGE DIFFERENCES BETWEEN THE TWO LEVELS OF RACE OR RELIGION, BELIEF,  
AND STATUS FOR "YES" RESPONSES TO THE INDIVIDUAL ITEMS OF THE  
SOCIAL DISTANCE SCALE, ADULT FORM

Items on social distance scale	Negro males N = 25			Negro females N = 25			Gentile males N = 30			Gentile females N = 33		
	Race	Be- lief	Status	Race	Be- lief	Status	Race	Be- lief	Status	Race	Be- lief	Status
Race × Belief × Status compari- sons												
Neighbor on street	-1	31	8	-5	37	-8	27	7	17	11	41	2
Work on charity drive	-2	39	13	-4	39	4	3	27	13	-9	40	-9
Speaking acquaintance	-3	14	10	-14	28	1	12	22	18	-2	19	-7
Go to party to which person was invited	-15	20	7	-20	28	10	23	7	17	2	14	-2
Member of social club	-4	29	9	-8	52	7	20	27	20	-6	42	3
Live in same apartment house	-3	10	3	-3	23	7	20	-3	7	14	23	4
Close personal friend	-5	35	-1	-15	60	-5	15	25	12	-1	44	7
Invite home to dinner	-13	22	2	-18	42	5	28	18	25	8	44	4
Have close relative marry	16	12	4	-8	30	0	47	23	10	18	24	12
Share an apartment with	-7	23	-6	-18	40	-7	20	17	10	5	40	4
	Jewish males N = 29			Jewish females N = 68			Gentile males N = 32			Gentile females N = 30		
	Reli- gion	Be- lief	Status	Reli- gion	Be- lief	Status	Reli- gion	Belief	Status	Reli- gion	Be- lief	Status
Religion × Belief × Status com- parisons												
Neighbor on street	-4	19	11	-1	29	0	11	30	2	-7	27	0
Work on charity drive	-2	26	-3	-2	34	-2	13	24	-2	-3	37	-3
Speaking acquaintance	-3	16	17	-4	26	6	10	40	-3	-4	20	6
Go to party to which person was invited	0	12	22	-9	19	3	-1	15	-7	-9	16	9
Member of social club	-13	28	13	-4	43	4	10	39	3	-1	36	2
Live in same apartment house	-2	19	7	-4	19	0	6	23	-4	-5	18	5
Close personal friend	-8	49	13	-2	61	4	14	62	2	7	46	11
Invite home to dinner	-8	31	16	-2	49	2	12	49	-1	5	42	16
Have close relative marry	-17	32	10	-20	34	5	16	32	10	9	28	16
Share an apartment with	-3	36	14	-5	43	2	13	39	10	10	33	10

for Jews on the six least intimate items. One reason for this finding may be that Jewish students tended to predominate in the "leading crowd" in the Commuter-town high school, as indicated by socio-metric data in the study by Hardyck and Smith (in preparation). For Jewish subjects, the only item on which there is moderately strong in-group preference in both sexes is "have close relative marry." In general, status is not particularly important, but for the gentile samples it becomes more so for the more intimate items, as was not the case in the top half of the table. Jewish males also show mod-

erately strong status effects on items throughout the scale, and these effects are significantly greater than are those for Jewish females ( $p < .05$ ). Corresponding percentage differences for the teenage form appear in Table 13. All the columns headed Belief again show large positive percentage differences, as none would expect from the results of the analysis of variance of total social distance scores. The findings with respect to Race for the gentile samples are different, however, from those with the adult form. Here, there is no significant sex difference in preference to white rather than Negro



stimulus teenagers. However, on one item: "Date your brother (sister)," gentile males show a much larger preference for the white stimulus persons as a date for their sibling than do the girls (41% versus 12%). This is clearly in line with societal demands and parallels findings on Form A for the item, "have close relative marry."

The present results are very similar to the findings of the Stein et al. (1965) study, which, it will be remembered Stein et al. involved gentile subjects but combined sexes for the analysis and used stimulus teenagers who were all high in status and varied only in race and belief. They found a significant belief effect on all 10 items ( $t$  tests could be employed in their design) and a significant race effect on only 3 items: "live in the same apartment house," "invite home to dinner," "date brother." The race effect also approached the .05 significance level on "go to a party with." They concluded that on such "sensitive" items race was important because the items reflected areas in which there are strong societal pressures against interracial contact. For the gentile samples in the present study, these same items show the largest differences in endorsements for white as versus Negro stimulus teenagers. The comparison of male and female subjects, new with the present study, shows that females are somewhat more likely than males to prefer white stimulus persons on the items concerning "live in the same apartment," "go to party with," and "invite home to dinner" but the reverse is true for "date your brother." In addition, female subjects show less acceptance of Negroes on the item, "eat lunch with." We can conclude, then, that the results of the Stein et al. study are essentially replicated by the present findings. For non-Jewish white subjects, belief is an important factor throughout the social distance scale, but race comes into play for the items that represent socially taboo areas of interracial contact.

For the Negro samples, similarity of belief is again quite important for inter-

personal preference, with the female subjects tending to show slightly larger positive percentages for belief than the males ( $p < .05$ ). Race effects on individual items are small and inconsistent.

The bottom half of Table 13 shows the percentage differences in response to teenage stimulus persons when religion, belief, and status are varied. Again, belief effects are all positive and fairly large for all items with all samples. The small religion effects may be summarized by saying that they are strongest for gentile females and for gentiles of both sexes for the more intimate items. The absence of appreciable religion effects on any of the items for the Jewish samples is perhaps surprising. For these samples, status is also moderately important, and becomes more so as the items increase in intimacy.

#### *Responses to Stimulus Individuals Who Vary in Race or Religion and Status Factors Only*

Stein et al. (1965) had found, in an analysis of responses of their subjects to a questionnaire that had been administered 2 months before the presentation of the stimulus persons varying in race and similarity of belief, that social distance to stimulus teenagers described in terms of race and status (with no information about belief) is determined by both of these factors, with the race effect explaining twice as much variance as the status effect.

Subjects in the present study had responded while in the eighth grade to similar stimulus teenagers or adults, with religion also varied. For teenage stimulus persons, status was varied as in the former study; for adults, it was varied by the combination of a professional occupation with the phrase "is making a good income" as opposed to a manual occupation with the phrase "is making a low income." For purposes of the present analysis, subjects were classified according to their own race and religion, and thus total social distance scale scores examined with

TABLE 13  
PERCENTAGE DIFFERENCES BETWEEN THE TWO LEVELS OF RACE OR RELIGION, BELIEF,  
AND STATUS FOR "YES" RESPONSES TO THE INDIVIDUAL ITEMS OF THE  
SOCIAL DISTANCE SCALE, TEENAGE FORM

Items on social distance scale	Negro males N = 23			Negro females N = 24			Gentile males N = 26			Gentile females N = 26		
	Race	Be- lief	Sta- tus	Race	Be- lief	Status	Race	Be- lief	Status	Race	Be- lief	Status
Race × Belief × Status com- parisons												
Sit next to in class	6	20	19	-2	40	2	4	23	20	-2	21	6
Work on committee with	19	38	16	0	46	17	-14	28	30	-2	33	21
Speaking acquaintance	6	29	10	-7	26	5	-8	26	11	-10	25	13
Go to party to which person was invited	-2	24	2	-9	34	-5	14	17	14	29	29	-2
Eat lunch with	-3	33	2	5	45	-1	7	30	20	29	36	2
Member of social group	-12	28	11	-8	45	8	1	32	10	12	42	8
Live in same apartment house	6	20	6	11	28	10	19	19	7	36	2	6
Close personal friend	4	22	8	-8	31	14	-5	34	15	12	35	15
Invite home to dinner	-3	29	11	-10	43	14	14	22	23	19	27	12
Date brother (sister)	-2	24	15	-13	42	5	41	14	10	12	23	15
	Jewish males N = 84			Jewish females N = 88			Gentile males N = 20			Gentile females N = 27		
	Reli- gion	Be- lief	Sta- tus	Reli- gion	Be- lief	Status	Reli- gion	Be- lief	Status	Reli- gion	Be- lief	Status
Religion × Belief × Status comparisons												
Sit next to in class	-5	14	15	-3	12	12	18	22	0	12	16	20
Work on committee with	-6	27	30	2	35	24	0	22	12	11	33	22
Speaking acquaintance	0	19	6	0	19	8	-2	16	24	3	26	11
Go to party to which person was invited	-7	15	11	3	24	8	7	18	-11	11	26	15
Eat lunch with	-2	27	11	-3	44	14	4	19	0	1	24	9
Member of social group	-5	32	21	-6	43	20	-5	28	-12	9	32	6
Live in same apartment house	-7	12	8	-5	8	5	6	13	6	20	6	2
Close personal friend	-2	40	25	-3	52	26	22	11	-3	18	30	23
Invite home to dinner	-5	38	20	0	50	20	10	6	-5	20	39	14
Date brother (sister)	-13	25	24	-7	36	28	6	13	21	18	34	19

respect to the stimulus persons specified in Table 14.<sup>5</sup>

This analysis will be discussed in terms of a summary of the 24 analyses of variance computed on these data (Table 15). Means and standard deviations are presented in Stein (1965, p. 80).

Looking first at the top half of Table 15, we can see that the race effect was sig-

<sup>5</sup> For Catholic subjects, race and religion were confounded in the descriptions of the Negro stimulus persons. Since there was no "Catholic Negro," the subjects had to respond to a "Protestant Negro." Only 591 of the 630 subjects had scores on the appropriate social distance scales in the interest and attitude questionnaire.

nificant at the .001 level in 9 of the 12 samples, and at lower levels in 2 other samples (Negro females, Form T,  $p < .01$ ; Negro males, Form A,  $p < .05$ ). It fell short of significance in only one sample (Negro male, Form T). Examination of the means shows that Negro subjects tend to prefer stimulus persons of their own race. Inspection of the column in Table 15 showing the proportion of variance contributed, however, reveals that race seems to be more important for white samples than for Negro samples. ( $N$  is too small to compute a sign test.)

When pitted against race, status has



significant effects in only 7 of the 12 pertinent samples, and in none of these does significance approach the .001 level. The rank-order difference between the  $\Omega^2$  values for the race and status effects shows that race contributes significantly more variance than status ( $p < .01$ ). In comparison to the race effect, then, status is a less powerful but still important determinant of choice. These results confirm the findings of Stein et al.

Status is strongly affected by the form of the questionnaire. Only two of the six analyses on the adult form as compared with five of six analyses on the teenage form yield significant results. The rank-order difference between  $\Omega^2$  values for Form T versus Form A is significant at less than the .05 level; more variance is contributed by status in Form T samples than in Form A samples. There seem to be two possible explanations for these findings. First, the status descriptions in the adult form may have been too vague ("making a good income"; "making a low income"). The other possibility is that adult status attributes are less important to teenagers than teenage status attributes. We may conclude, then, that in the absence of information about beliefs, race is a powerful determinant of interpersonal preference with status contributing a smaller but significant influence that is confined primarily to the teenage form. In general, there are few significant interaction effects.

The bottom half of Table 15 presents the results of analyses in which religion and status are varied. All samples show highly significant religion effects (nine reach the .001 level and the other three the .01 level). The three samples in which the religion effect is only significant at  $p < .01$  are all Protestant samples. This finding would follow if religious affiliation is somewhat more salient for the "minority" Jewish and Catholic subjects than for the "majority" Protestants. In 10 of the 12 samples there are significant status effects, with 6 of these being significant at  $p < .001$ . The rank-order difference between the  $\Omega^2$  values for religion and status was not significant. Status

TABLE 14  
STIMULUS PERSONS USED IN ANALYSES IN WHICH  
RACE OR RELIGION AND STATUS ARE VARIED

Race or Religion of Subject	Race Varied	Religion Varied
	Stimulus Persons Used in Analysis	Stimulus Persons Used in Analysis
Protestant	White Protestant	White Protestant
	Negro Protestant	White Jewish
Catholic	White Catholic	White Catholic
	Negro Protestant	White Jewish
Jewish		White Protestant
		White Jewish
Negro	White Protestant	
	Negro Protestant	

differences thus appear to be more important when status is varied with religion than when it is varied with race—a finding that did not appear in the analyses reported earlier in which similarity of belief was also varied. This finding is not too surprising, in that religion is a less powerful variable than race, and, of course, belief. When only religion and status are varied, subjects are as likely to make distinctions on the basis of one factor as they are on the other. When race and status are varied, the factor of race predominates, and, as we have seen, when information about belief is added, this tends to wash out the influence of the other factors.

Again, the status factor seems particularly important for all four Jewish samples, which show status effects significant at  $p < .001$  and have status contributing a large proportion of the variance. Only 4 of the 36 interactions are significant.

#### IMPLICATIONS

In a full-scale test of Rokeach's theory of belief prejudice with ninth-grade students, the present results point overwhelmingly to the validity of the theory. When information about a stimulus person's beliefs in the area of personal values is made available, *perceived* similarity—or dissimilarity—in beliefs is the

TABLE 15

SUMMARY OF THE 24 ANALYSES OF VARIANCE FOR RESPONSES TO THE TOTAL SOCIAL DISTANCE SCALES OF THE INTEREST AND ATTITUDE QUESTIONNAIRE WHICH WAS GIVEN WHEN THE STUDENTS WERE IN THE 8TH GRADE

Sample	Form	N	Race		Status		Individual × Race	Individual × Status	Race × Status
			F	Prop. of variance	F	Prop. of variance	F	F	F
Negro males	A	23	5.31*	.03	1.41	.00	1.55	2.31	.22
Negro females	A	18	18.51****	.17	.33	.00	3.66	1.26	.41
Protestant males	A	23	19.01****	.16	8.05***	.02	6.70*	2.35	1.15
Protestant females	A	26	40.41****	.28	4.96*	.00	5.54*	.82	1.08
Catholic males	A	27	29.87****	.16	1.54	.00	3.79	2.38	4.26*
Catholic females	A	30	29.18****	.22	1.41	.00	5.97*	1.46	.51
Negro males	T	18	3.26	.01	6.43*	.08	1.43	3.44	.15
Negro females	T	20	11.32***	.09	5.64*	.03	3.15	2.28	1.43
Protestant males	T	15	26.17****	.16	13.89***	.14	1.40	2.48	.24
Protestant females	T	16	24.35****	.36	11.89***	.03	8.66*	1.67	0.0
Catholic males	T	28	26.37****	.14	7.17*	.03	2.09	1.82	0.0
Catholic females	T	31	69.07****	.31	2.30	.00	3.44	2.99	.01
			Religion		Status		Individual × Religion	Individual × Status	Religion × Status
Jewish males	A	52	39.26****	.11	33.64****	.09	2.42	2.53	0.0
Jewish females	A	55	62.09****	.20	16.34****	.04	3.66	2.66	.07
Protestant males	A	23	12.04***	.08	4.54*	.01	3.42	1.86	.09
Protestant females	A	27	14.89****	.08	2.85	.01	2.78	2.85	.22
Catholic males	A	27	28.99****	.18	7.54***	.02	2.06	.81	.17
Catholic females	A	32	22.26****	.22	2.38	.00	24.39****	1.82	4.35*
Jewish males	T	74	37.71****	.04	102.90****	.30	2.54	6.95*	3.50
Jewish females	T	73	28.36****	.04	69.76****	.22	2.37	5.34*	.43
Protestant males	T	15	16.58***	.07	16.14***	.21	.83	2.64	2.46
Protestant females	T	16	8.78***	.10	16.87****	.14	3.82	2.47	3.55
Catholic males	T	27	39.96****	.23	15.78****	.08	1.64	1.45	.97
Catholic females	T	32	22.12****	.12	6.73*	.03	4.05	4.14	2.13

\*  $p < .05$ .  
\*\*\*  $p < .01$ .  
\*\*\*\*  $p < .001$ .

primary determinant of attitudes of white gentiles toward Negroes and Jews. Likewise, knowledge of belief systems, when it is made available, is the most important factor in Negro and Jewish students' attitudes toward members of the majority. Only secondarily does racial or religious membership per se, or high versus low relative socioeconomic status, influence the students' feelings and action or orientations toward others under these circumstances.

The generality of the findings is impressive. These results hold up for both teen-

age and adult forms of the questionnaire, for both sexes, and for Negro, Catholic, Protestant, and Jewish subjects as well as for ninth-grade students in California (Stein et al., 1965) questioned about Negro stimulus persons, in the absence of any substantial opportunity for interaction with Negroes.

It is important to elaborate on these findings since they initially give the appearance of opposing common notions of prejudice. In conventional accounts, so much emphasis has been placed on ethnic membership per se as a determinant of



prejudice toward members of minority groups that at first it seems incredible that belief incongruence could be the major determinant of prejudice. Yet these rather striking results can be reconciled with the practical importance of ethnic membership in social life.

In the first place, the present study may confront gentile teenagers for the first time with information that tells them that there are Negroes who believe in many of the same things that they themselves do; that these Negroes hold many values that they themselves consider of vital importance. We are asking students to make decisions about their feelings towards and willingness to interact with Negroes whom they have not before evaluated from this point of view. In a sense, it is like asking them, "If Negroes were more like you than you think they are and believed in the same things you do, would you then like them?" Our data give an affirmative answer to this question, particularly in regard to "feelings" toward Negroes, but the answer must be qualified by a second important feature of the data.

The students do make a distinction between situations that are relatively free from strong societal pressures, on the one hand, and ones that represent areas of interracial contact in which societal taboos are continually reinforced, on the other. From the data for the individual items of the social distance scale, it appears that gentile subjects are willing to interact with like-valued Negroes in such situations as "sit next to in class," "work on a committee with," "have as a speaking acquaintance," "eat lunch with," and even "have as a member of one's social group" or "have as a close personal friend." However, in situations of culturally defined intimacy or in which parents or other adults would be visibly involved in the contact, the subjects show great reluctance to interact with Negroes. Thus, on such items as "invite home to dinner," "live in the same apartment house," "date brother," "have a close relative marry," and even "have as a neighbor on the street," gentile subjects are

much more prone to react in racial terms, frequently rejecting contact with Negroes.

This finding appears to give partial support to Triandis' (1961) criticism of Rokeach's theory. Triandis claimed that we object to having a Negro live next door to us because he is Negro, not because of what he believes. Since this type of situation is one in which societal pressures discourage interracial contact, belief is a less powerful determinant than race for some subjects.

Rokeach<sup>6</sup> suggests, however, that we still need not invoke an interpretation based on racial criteria for these kinds of situations. Instead, he claims that the principle of belief congruence is applicable but not in terms of what the Negro is seen to believe. In such a situation as having a Negro live next door, Rokeach suggests that the white person believes that the presence of Negroes in the neighborhood would affect the rise and fall of real estate values. This belief, therefore, could account for not desiring a Negro as a next door neighbor but could be quite independent of the white person's attitude toward the Negro. Rokeach offers an additional example: "Suppose a white person refused to sit down next to a Negro on a bus in Montgomery, Alabama. Is it because that person is black, because of certain beliefs that he sees the Negro to have, or because the white person *believes* that if he sits down the bus driver will ask him to get off the bus, or *believes* that he will be breaking a law for which he can be arrested?" The question may well be raised, however, whether a belief theory of prejudice thus extended is capable of empirical disconfirmation. The present study has found strong support for the more restricted version of the theory as the major though not exclusive determinant of interpersonal prejudice.

Negro subjects, in responding to white stimulus persons, make few if any of the distinctions that whites do in the situations described on the social distance scale. In general, they would seem to have little to

<sup>6</sup> Personal communication.

lose and much to gain from social relations with whites.

The results for the religious comparisons do not follow this general interpretation. Although there are some subjects who balk at close personal contact with stimulus persons of another religion, in almost all cases difference in belief is the crucial factor in determining interreligious relations. There are fewer "taboo areas" for interreligious contact than for interracial contact. In the case of the former, only the items, "invite home to dinner," and "have a close relative marry," and possibly, "date brother," seem to reflect socially strained areas of contact.

The interpretation of the Rokeach and Triandis controversy offered by Stein et al. (1965) thus seems to be strengthened by the present findings. Knowledge of belief systems, if they reflect belief congruence, leads many more gentile subjects to evaluate their feelings and potential behaviors toward Negroes in a positive manner. Without this knowledge, Negroes are assumed to have dissimilar beliefs and values and are consequently rejected. Even when information about belief systems is supplied, there are still some subjects who either feel bound by societal pressures or genuinely harbor hostile feelings toward Negroes and refuse to interact with them particularly in areas of intimate contact. It is not surprising, then, that when information about beliefs is absent and only race and status are varied, racial considerations become dominant.

Some cautionary remarks are in order, in view of the compelling consistency of the findings. This study ignores important conditions in social reality which might well mitigate against our findings. The theory of belief prejudice needs to be tested in conjunction with variations in the social forces which heavily influence the formation and maintenance of prejudiced attitudes (see Rokeach & Mezei, 1966, for a beginning in this direction). Moreover, the theory needs cross-validation in both southern and northern communities wherein racial strife is a common occurrence and

where *opportunities* to perceive similarity of beliefs can be limited by conditions in the social structure.

While the values of the factors of race and religious affiliation in this study are absolute (e.g. white, Negro, etc.), the value items representing the belief factor, and the status attributes, are arbitrarily set. Other possible values for these factors need to be sampled before we can know the limits to which the present findings can be generalized.

Caution is also required in regard to possible effects of the relative salience with which information about race, religion, and belief was presented in the experimental materials. Race or religion was indicated by a mere word whereas the information on belief required an entire page. One could also, certainly, have played down the importance of belief by using less relevant values or by reducing the amount of contrast between similar and dissimilar values. For that matter, the salience of race could have been increased by adding pictures of the stimulus persons. In addition, for these northern subjects, it is certainly "socially undesirable" for them to stress race per se especially considering the intellectualism of the method and setting. Moreover, Triandis and Davis (1965) were able to obtain powerful race effects with subjects classified independently as "racially prejudiced" and with the use of social distance scale items reflecting negative behaviors such as "exclude from the neighborhood." In a sense, then, the results are specific to the method used and need further checking to see how much they are tied to the method. To show that one can pick evaluative beliefs, however, that so predominate over race is essentially to support Rokeach's theory, even though there are other beliefs for which the prediction might not hold. Knowledge of the perceived similarity of belief systems is clearly a crucial factor in the understanding of prejudice. Many possible strategies for the solution of racial and ethnic tensions follow from this fact.



## REFERENCES

- Biomedical computer programs. *The general linear hypothesis*. (BMD 14), University of California, Division of Biostatistics, Los Angeles, 1961.
- BYRNE, D., & WONG, T. J. Racial prejudice, interpersonal attraction, and assumed dissimilarity of attitudes. *Journal of Abnormal and Social Psychology*, 1962, **65**, 246-253.
- EDWARDS, A. L. *Statistical methods for the behavioral sciences*. New York: Rinehart, 1954.
- HAYS, W. L. *Statistics for psychologists*. New York: Holt, 1963.
- MORRIS, C. *Varieties of human value*. Chicago: University of Chicago Press, 1956.
- ROKEACH, M. Belief versus race as determinants of social distance: Comment on Triandis' paper. *Journal of Abnormal and Social Psychology*, 1961, **62**, 187-188.
- ROKEACH, M., & MEZEL, L. Race and shared belief as factors in social choice. *Science*, 1966, **151**, 167-172.
- ROKEACH, M., SMITH, P. W., & EVANS, R. I. Two kinds of prejudice or one? In M. Rokeach (Ed.), *The open and closed mind*. New York: Basic Books, 1960. Pp. 132-168.
- STEIN, D. D. Similarity of belief systems and interpersonal preference: A test of Rokeach's theory of prejudice. Unpublished doctoral dissertation, University of California, Berkeley, 1965.
- STEIN, D. D., HARDYCK, J. A., & SMITH, M. B. Race and belief: An open and shut case. *Journal of Personality and Social Psychology*, 1965, **1**, 281-289.
- TRIANDIS, H. C. A note on Rokeach's theory of prejudice. *Journal of Abnormal and Social Psychology*, 1961, **62**, 184-186.
- TRIANDIS, H. C., & DAVIS, E. E. Race and belief as determinants of behavioral intentions. *Journal of Personality and Social Psychology*, 1965, **2**, 715-725.
- WINER, B. J. *Statistical principles in experimental design*. New York: McGraw-Hill, 1962.

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